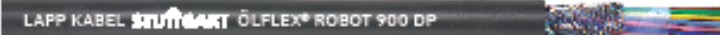
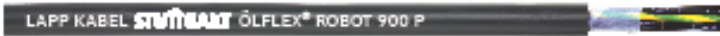


ÖLFLEX® ROBOT 900 P/900 DP

Robotic Cable for Flexing & Torsion Motion



ÖLFLEX® ROBOT 900 P is a multi-conductor control and signal monitoring cable. It is designed to withstand the extreme demands of twisting and bending stresses in robotic applications. ÖLFLEX® ROBOT 900 DP has a tinned copper spiral shield and is designed for use where EMI emissions need to be suppressed.

Recommended Applications

Multi-axis articulated robots with twisting and bending motion; automated handling equipment; cable tracks or moving machine parts.

Approvals



Unshielded Construction

- Conductors:** Finely stranded bare copper
- Insulation:** TPE; conductors twisted in layers with low-friction core wrap
- Jacket:** Polyurethane; black

Shielded Construction

- Conductors:** Finely stranded bare copper
- Insulation:** TPE; conductors twisted in layers with low-friction core wrap
- Shielding:** Tinned copper spiral shield
- Jacket:** Polyurethane; black

Application Advantage

- Designed for applications where combined twisting and bending occur
- Specially formulated PUR jacket protects against the heat of industrial plant environments
- Maximum twist of $\pm 360^\circ/m$ unshielded for wide variety of robot applications

Cable Attributes		page 640	
OIL	OR-05	FLAME	FR-02
MOTION	T-01	MECH.	MP-05

Complete the installation	
SKINTOP® Strain Relief page 488	EPIC® Connectors page 280

Technical Data

Minimum Bend Radius:		Test Voltage:	
- unshielded:	15 x cable diameter	- up to 22 AWG:	1500V
- shielded:	15 x cable diameter	- 20 AWG & larger:	3000V
Maximum Torsion (Twist):		Conductor Stranding:	Extra fine wire
- unshielded:	$\pm 360^\circ/m$	Color Code:	
- shielded:	$\pm 180^\circ/m$	- up to 22 AWG:	DIN 47100: Chart 8, page 674
Temperature Range:		- 20 AWG & larger:	Black with white numbers, plus green/yellow ground
- for flexible use:	-40°C to +80°C	Approvals:	CE & RoHS Based on VDE 0281/0282 & 0812
Nominal Voltage:	300/500V		

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question. For current information go to our website.

ÖLFLEX® ROBOT 900 P

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)	Copper Weight (lb./mft)	Approx. Weight (lb./mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)	Copper Weight (lb./mft)	Approx. Weight (lb./mft)	SKINTOP® Non-Metallic PG Thread
24 AWG (0.25 mm²)						10 AWG (1.50 mm²)					
0028110	7	0.244 6.2	11	32	S2107	0028198	18	0.622 16.8	174	300	S2121
0028116	26	0.402 10.2	40	96	S2118	14 AWG (2.50 mm²)					
20 AWG (0.50 mm²)						0028181	3	0.300 9.3	48	91	S2111
0028146	18	0.441 11.2	68	81	S2118	0028182	4	0.398 10.1	66	116	S2118
0028146	26	0.624 15.8	81	171	S2116	6 AWG (10 mm²)					
19 AWG (0.75 mm²)						0028400	3	0.848 21.4	310	484	S2129
0028160	4	0.260 6.6	19	42	S2109	4 AWG (25 mm²)					
0028164	14	0.441 11.2	68	184	S2118	0028187	3	1.081 26.2	484	791	S2186
18 AWG (1.00 mm²)						2 AWG (35 mm²)					
0028170*	2	0.244 6.2	18	32	S2107	0028189	3	1.184 28.8	677	1047	S2186
0028171	3	0.256 6.5	19	41	S2109						
0028172	4	0.276 7.0	26	61	S2111						
0028174	7	0.306 9.3	48	88	S2111						
0028176	12	0.458 11.6	77	145	S2118						
0028186	16 + 1 pr	0.680 16.0	131	268	S2121						
0028178	18	0.620 15.2	110	198	S2116						
0028186	28 + 1 pr	0.681 17.3	176	316	S2129						
0028180	26	0.646 16.4	161	291	S2121						
0028190	34	0.788 19.9	219	384	S2129						
0028191	41	0.878 22.3	264	474	S2129						

* 2c cable does not include ground.

ÖLFLEX® ROBOT 900 DP

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)	Copper Weight (lb./mft)	Approx. Weight (lb./mft)	SKINTOP® MS-8C PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)	Copper Weight (lb./mft)	Approx. Weight (lb./mft)	SKINTOP® MS-8C PG Thread
26 AWG (0.14 mm²)						22 AWG (0.34 mm²)					
0028100	12	0.264 6.7	29	46	83112210	0028186	4	0.224 5.7	14	31	83112210
0028106	3pr	0.244 6.2	11	30	83112210	0028186	5pr	0.368 9.1	43	77	83112220
24 AWG (0.25 mm²)						16 AWG (1.50 mm²)					
0028126	26	0.437 11.1	70	128	83112280	0028196	12	0.661 14.0	174	266	83112260

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section. If not otherwise specified, all values relating to the product are nominal values. For current information go to our website.